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Mine Safety and Health Administration

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Self-Rescuer Inspection Procedures Handbook

COAL SELF-RESCUER INSPECTION PROCEDURES HANDBOOK

PREFACE

This handbook sets forth minimum requirements for Coal Mine Safety and Health (CMS&H) districts to use in developing inspection procedures the district will follow in:

1. conducting an annual review of each MSHA-approved Self-Contained Self-Rescuer (SCSR) storage plan;

2. conducting a quarterly mine-site evaluation of approved SCSR storage plan parameters;

3. conducting a quarterly physical examination of a representative number of each type of self-rescue device in use at each underground coal mine;

4. conducting an annual evaluation of and monitoring the mine operator's self-rescuer training program;

5. conducting an annual mine-site survey of the self-rescue devices in use at each underground coal mine;

6. providing quarterly training to all CMS&H employees who are required to enter an underground coal mine; and

7. investigating and reporting problems associated with self-rescue devices.

Each district should consider using the Employee Involvement and Quality Improvement (EIQI) Pairs in developing the inspection procedures the district will follow to provide reasonable assurance that the self-rescuer program provides for the health and safety of the miners and CMS&H enforcement personnel. A copy of the district's written procedures should be provided to all underground enforcement personnel.

_____ _____

Robert A. Elam Date
Administrator
for Coal Mine Safety and Health

Release 1 (March 1, 1999)

COAL SELF-RESCUER INSPECTION PROCEDURES HANDBOOK

INTRODUCTION

Authority

Section 317(n) of the Federal Mine Safety and Health Act of 1977, Public Law 91-173, as amended by Public Law 95-164, states in part that each mine operator shall make a self-rescue device approved by the Secretary available to each miner. The self-rescue device provided must be adequate to protect the miner for one hour or longer. In addition, the mine operator shall train each miner in the use of such devices. Further, Title 30 of the Code of Federal Regulations (30 CFR) sets forth additional requirements under Parts 48 and 75 regarding the type and frequency of training, and the approval, use, location, examination, and maintenance of the self-rescue devices provided for use at a mine.

Purpose

This handbook has been developed to provide reasonable assurance that the MSHA inspection personnel are provided adequate guidance in how to enforce the regulatory requirements of Title 30 CFR, to ensure the self-rescue devices provided for use at a mine-site are used, located, examined and maintained in accordance with the regulations, and that miners are receiving adequate training in the use of such devices. This handbook also includes provisions for ensuring that MSHA inspection personnel are adequately trained in the use, examination, and maintenance of the self-rescue devices they are assigned to carry.

Responsibility

Section 103(a)(4) of the Federal Mine Safety and Health Act of 1977, Public Law 91-173, as amended by Public Law 95-164, gives MSHA the responsibility for conducting inspections and investigations to determine compliance with the mandatory health and safety standards issued under this Act and Title 30 CFR.

Directives Affected

This handbook cancels and supersedes MSHA Handbook Number PH93-V-8 dated November 12, 1993, titled FSR/SCSR Inspection Procedures Handbook, and all other previously issued procedural and administrative instructions for this subject material. It does not cancel or supersede any policy in the MSHA Program Policy Manual.

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Annual Review Of Approved SCSR Storage Plans

This Chapter applies only to underground coal mines that have an MSHA-approved SCSR storage plan allowing miners to be further than 25 feet from their one-hour SCSR devices.

Each CMS&H District should implement procedures for conducting an annual review (each 12-month period) of each MSHA-approved SCSR storage plan.

A. Changes In Mining Conditions and/or Mining Process

The person conducting the annual review should determine if there have been any significant changes in the in-mine conditions or the mining process which impact the criteria used by the district in granting approval of the mine operator's SCSR storage plan.

In making this determination the person conducting the review should evaluate: 1) the eleven factors outlined in 30 CFR Section 75.1714-2(e)(1)(i) through (xi); 2) the SCSR Storage Plan Approval Guidelines in Volume V of the MSHA Program Policy Manual; and 3) any changes that have been made to the MSHA SCSR Storage Plan Approval Guidelines since the plan was approved or last reviewed.

B. Requiring Changes To Previously Approved Plans

If the annual review of the approved SCSR storage plan identifies deficiencies that require the plan to be revised, the district should:

1) inform the mine operator in writing that a determination has been made that the currently approved plan is not adequate to ensure the miners are provided adequate self-rescuer protection;

2) document the deficiencies identified which resulted in this determination;

3) inform the mine operator of the corrective action(s) that must be taken to adequately address the identified deficiencies;

4) fix a specific amount of time for the mine operator to

make the necessary changes to adequately address the identified deficiencies;

5) inform the mine operator of his/her rights to meet with the district to discuss these findings and arrive at an effective solution; and

6) inform the mine operator of the consequences of failing to take appropriate corrective action to adequately address the identified deficiencies within the specified time period.

C. Documentation Of The Annual Plan Review

The district procedures should include adequate documentation to ensure that each approved SCSR storage plan is reviewed by the district annually (at no more than a 12-month interval).

As a minimum, this documentation should include: 1) the mine name; 2) mine ID number) 3) name of the person(s) who conducted the review; 4) date(s) the review was conducted; and 5) any identified deficiencies that would necessitate a revision to the approved plan.

A copy of this documentation should be filed with the official copy of the approved SCSR storage plan and in the Uniform Mine File Notebook for the affected mine, behind the tab marked Fire Fighting and Evacuation.

The procedures implemented by the district should describe the process the district will use in addressing any deficiencies, identified as a part of the annual review, that may require the approved plan to be revised.

Quarterly Evaluation Of Approved Plan Parameters For SCSR Storage Plans

This Chapter applies only to underground coal mines that have an MSHA-approved SCSR storage plan allowing miners to be further than 25 feet from their one-hour SCSR devices.

Each district should implement inspection procedures to ensure a quarterly mine-site evaluation is conducted at all mines that have an MSHA-approved SCSR storage plan.

A. Quarterly Mine-Site Evaluations

The person conducting the quarterly mine-site evaluation should be familiar with each of the parameters identified in the mine operator's approved SCSR storage plan.

The quarterly mine-site evaluation should be conducted at each designated SCSR storage location (cache) identified in the mine operator's approved SCSR storage plan.

B. Noncompliance Determinations

If a determination is made that a mine operator is not complying with one or more of the approved SCSR storage plan parameters, the inspector should document, in their inspection notes, each of the approved parameters that were not in compliance and take appropriate enforcement action by citing section 75.1101-23.

C. Documentation Of The Quarterly Evaluation

Inspectors should document that they conducted a mine-site evaluation of the approved SCSR storage plan parameters in their inspection notes. This may be done by either:

1) including a statement in the daily inspection notes (MSHA Form 7000-10-a) that, for example, the approved SCSR storage plan parameters were evaluated, which would serve as documentation that the inspector evaluated the approved SCSR storage plan for the area covered by the inspection notes for that day; or

2) including a statement in the remarks section, Item 17 on the Mine Activity Data sheet (MSHA Form 2000-22) that, for example, the approved SCSR storage plan parameters were evaluated at each of the designated storage caches identified in the approved plan. This would serve as documentation that each designated storage cache was evaluated during this inspection.

Quarterly Physical Examinations Of Self-Rescue Devices

A. Number of Devices To Be Examined

Each district should implement inspection procedures to ensure that a physical examination is conducted quarterly on at least 10 percent of each type of self-rescue device in use at each underground coal mine.

> Note: This applies to all underground coal mines and includes an examination of each type of Filter Self-Rescue (FSR) device and Self-Contained Self-Rescue (SCSR) device in use at each underground mine.

B. Prior To Conducting The Physical Examination

The person conducting the physical examination of the self-rescue devices should be fully trained in the manufacturer's approved, daily and 90-day inspection requirements, condition of use requirements, and service life periods. The Daily and 90-Day Inspection Procedures and Service Life Periods for each approved self-rescue device are included in Appendix B of this Handbook.

> NOTE: If a question is raised concerning a difference in the inspection procedures outlined in Appendix B and the manufacturer's approved instruction manual, dated after the effective date of this handbook, the inspector should defer to the approved manual.

C. Physical Examination Procedures

The inspector conducting the physical examination of the self-rescue devices should follow the daily inspection procedure for the device being examined, as outlined in Appendix B.

As a part of this examination, the inspector should review the mine operator's records to determine if the mine operator: 1) certified that the required 90-day examination was conducted on each self-rescue device in use at the mine; and 2) documented the date of the examination. If possible, the inspector should also determine who conducted the 90-day examination and if this person knew, understood, and followed the manufacturer's approved 90-day inspection procedures when conducting the examination.

1. Examination of devices being worn or carried by the miners:

30 CFR Section 75.1714-3 requires in part that each self-rescue device that is worn or carried by a miner be inspected after each use by a person trained to perform this function. The manufacturer's approved instructions for conditions of use include minimum daily inspection criteria for examining devices that are deployed as worn or carried. Any device which does not meet the daily inspection requirements shall be removed from service.

When examining a self-rescue device that is being worn or carried by a miner, the inspector should:

a) interview the miner explaining the purpose of the examination and determine if the miner or some other trained individual conducted the daily examination of the device;

b) acquire the device from the miner;

c) examine the device by following the daily inspection procedures for the device being examined, as outlined in Appendix B of this Handbook; and

d) if not previously established, determine the date the mine operator conducted the last 90-day examination of the device.

2. Examination of devices located in designated section storage caches, on personnel carriers, or stored in the mine and not taken out of the mine at the end of the shift:

30 CFR Section 75.1714-3 requires in part that each self-rescue device be inspected by a person trained to perform this function at intervals not exceeding 90 days. The examination shall be conducted in accordance with the manufacturer's approved instructions for conditions of use. Any device which does not meet the manufacturer's approved daily and/or 90-day inspection requirements shall be removed from service.

When examining a self-rescue device that is located in a

designated section storage cache, on a personnel carrier, or stored in the mine and not taken out of the mine at the end of the shift, the inspector should:

a) conduct a visual examination of each available device looking for any obvious sign that may indicate a device is not being adequately maintained;

b) select one or more devices for a further physical examination;

c) examine each of the selected devices by following the daily inspection procedures for the device being examined, as outlined in Appendix B of this handbook; and

d) if not previously established, determine the date the mine operator conducted the last 90-day examination of the devices.

C. Noncompliance Determinations

If the physical examination reveals that a self-rescue device was not maintained and/or inspected in accordance with the instructions outlined in Appendix B, appropriate enforcement action should be taken by citing Section 75.1714-3. The abatement period should be determined based on the nature of the identified problem. Some devices may be inspected and returned to service, while others may need to be replaced due to defects that may impact the ability of the device to perform as designed.

If a determination is made that the person who conducted the daily or 90-day inspection did not know, understand, or follow the manufacturer's approved inspection procedures, appropriate enforcement action should be taken by citing Section 75.1714-3(a). The abatement time should include sufficient time to allow the mine operator to conduct the required daily and/or 90-day examination of all self-rescue devices in use at the affected mine. If possible, prior to terminating the citation, the inspector should observe/monitor the process used by the mine operator when conducting the daily and/or 90-day examination that was required in order to terminate the citation.

D. Documentation Requirements

Inspectors should document the following information in their inspection notes:

1. the date(s) the MSHA examination was conducted;
2. the name of the manufacturer of each device examined;
3. the model and serial number of each device examined;
4. the location of each device at the time of examination; and
5. the date the mine operator conducted the last 90-day examination of the device.

Periodic Monitoring Of Self-Rescuer Part 48 Training

30 CFR Part 48 requires in part that each underground mine operator include a course of instruction and demonstration in the use, care, and maintenance of self-rescue devices in use at the mine. The course shall include instruction in the complete donning procedure in which each miner assumes a donning position, opens the device, activates the device, inserts the mouthpiece or simulates this task while explaining proper insertion of the mouthpiece, and puts on the nose clip.

Accordingly, each district should periodically monitor the self-rescuer training being provided by underground coal mine operators.

The district procedures should include a provision for monitoring at least one self-rescuer training session at each underground coal mine annually.

The district procedures should detail the process the district will use to ensure that the self-rescuer training being provided to the miners:

1) adequately addresses each element of the required Part 48 self-rescuer training;
2) adequately addresses the self-rescuer manufacturer's approved instructions in the proper use, care, maintenance, and donning of each type of self-rescue device in use at each mine; and
3) ensures that all miners receive the required training for each type of self-rescue device in use at the mine at least annually.

If the required self-rescuer training is provided by a training center or facility that provides training for more than one mine, the district procedures should include the process the district will use in:

1) ensuring that the miners who attend this training receive training for the self-rescue device(s) in use at the mine where they work; and
2) ensuring that all miners who work at mines that use a training center or facility to provide the required training receive the required self-rescuer training at least annually.

The inspector assigned to monitor the operator's self-rescuer training must be familiar with the manufacturer's condition-of-use requirements for each type of self-rescue device in use at the mine being monitored. Since the monitoring inspection may result in a need for enforcement action, the person assigned by the district to monitor the operator's self-rescuer training should be an Authorized Representative (AR).

The Part 48 self-rescuer training provided to the miners should include adequate instruction in the following items.

1. The self-rescuer manufacturer's approved instructions in the proper use, care, maintenance, and donning of <u>each</u> type of self-rescue device in use at each mine.

2. If more than one type of device is in use at a mine, each miner who would rely on the use of these devices must demonstrate his or her ability to don each type of device provided for use at the mine. Each miner must assume a donning position, open the device, activate the device, insert the mouthpiece or simulate this task while explaining proper insertion of the mouthpiece, and put on the nose clip.

3. If miners are required to wear or carry the self-rescue device, the miners should also receive training in the manufacturer's approved daily examination requirements.

<u>Noncompliance Determination</u>

If a determination is made that the self-rescuer training did not provide adequate instruction to the miners in each of the elements required under 30 CFR Part 48 for each of the self-rescue devices provided for use at the mine, appropriate enforcement action should be taken.

The body of the citation should define which elements of the self-rescuer training were not adequate. The inspector may need to evaluate the mine operator's training records to determine the number of miners affected and to fix an appropriate abatement period.

If a citation requires the mine operator to provide additional

training to the miners to abate the citation, the district should make arrangements to monitor at least one of these self-rescuer training sessions before terminating the citation.

Annual Survey Of Self-Rescue Devices

Each district should conduct a self-rescuer survey at each underground coal mine annually. This survey should be conducted as a part of any regularly scheduled inspection activity. The information collected will be used to assess: 1) the type, quantity, and method of deployment of each self-rescue device provided for use in the coal mining industry; and 2) to document some of the in-mine conditions that may impact the ability of miners to escape a mine in the event of an emergency. (See attachments in Appendix A: MSHA Form 2000-220 (March 2000 Revised); and Self-Rescuer Survey Data Sheet.)

This information should be collected over a short period of time. Accordingly, each district should ensure that the survey is conducted at all underground coal mines in **A** and **B** status during the third underground inspection quarter (April 1 through June 30) of each year. Further, when a new mine goes into producing status, a survey should be conducted during the first inspection quarter.

Results of the survey should be recorded on MSHA Form 2000-220 (March 2000 Revised) and on the Self-Rescuer Survey Data Sheet. The model number, serial number, date of manufacture, and method of deployment should be documented for each self-rescue device provided for use at each underground coal mine.

Care should be taken to ensure that the information on the completed MSHA Form 2000-220 (March 2000 Revised) and the Self-Rescuer Survey Data Sheet is legible, accurate, and complete. A copy of the completed MSHA Form 2000-220 (March 2000 Revised) and the Self-Rescuer Survey Data Sheet for each underground coal mine should be sent to the Headquarters Division of Health at the completion of the inspection, but no later than July 15 of each year. Copies of the completed survey for a new mine should be forwarded to Headquarters within 15 days of completion of the inspection.

The Division of Health will enter the information in a national self-rescuer database. The database will be up-dated periodically and provide MSHA with information that can be used to assess the impact that self-rescuer issues have on the coal mining industry.

Quarterly Self-Rescuer Training For CMS&H Personnel

It is essential that all CMS&H personnel who are required to enter an underground mine be proficient in the use, care, maintenance, and examination of each type of self-rescue device they may be required to wear or carry as a part of their underground inspection duties. Accordingly, each CMS&H District should provide quarterly self-rescuer training to all CMS&H personnel who are required to enter an underground mine. It is not necessary that the quarterly training be provided to CMS&H personnel who do not regularly go underground. However, if more than 90 days has elapsed since an individual received the required training, the individual should be provided the training prior to entering an underground mine.

The procedures developed by the district should include a course of instruction and hands-on demonstration in the use, care, maintenance, and examination of each type of self-rescue device provided for use in the district.

A. Daily and 90-Day Examination of Devices

1. Daily Examination of CMS&H Self-Rescue Devices:

A daily examination shall be conducted, by a competent person, on each self-rescue device carried by CMS&H personnel prior to the self-rescue device being taken underground on each shift that the device will be used.

CMS&H personnel should be given training to provide reasonable assurance that they know the daily examination procedures and understand the importance of conducting the required daily examination prior to taking the device underground. Such training should include instruction in the manufacturer’s condition-of-use requirements as outlined in the manufacturer’s approved instruction manual.

The district training should address what should be done by CMS&H personnel if a device does not pass each element of the manufacturer’s approved daily examination requirements. The manufacturer specifies temperature ranges for the safe storage and maintenance of devices. CMS&H personnel should be instructed to make sure that a self-rescue device is not left in an uncontrolled environment where the device may be exposed to temperature ranges above or below those specified by the

manufacturer.

Accordingly, the district procedures should prohibit leaving self-rescue devices in a vehicle or any other location where the device may be exposed to uncontrolled temperature ranges for extended periods of time.

NOTE: If a device has been stored in an area where the temperature is below that specified by the manufacturer, the device can be brought back to an acceptable temperature and may be placed back in service. Conversely, if a device has been stored in an area where the temperature was above that specified by the manufacturer, the device should be removed from service.

A record of the daily examination is not required unless the examination identifies a defect that requires a device to be removed from service. In such cases, the record should specify:

1) the defect(s) that resulted in removing the device from service;
2) the date the defect was identified; and
3) what was done with the device.

2. 90-Day Examination of CMS&H Self-Rescue Devices:

Each self-rescue device shall be examined by a competent person each 90-day period. This includes self-rescue devices that are not assigned to individuals but are available for use in the district in the event of an emergency.

The 90-day examination should be conducted by a competent person in accordance with the procedures outlined in the appropriate manufacturer’s approved manual.

A record of the 90-day examination should be maintained in the CMS&H office where the particular self-rescue device is located. The 90-day examination record for each device should be maintained for the life of the self-rescue device. The record should include:

1) the Serial Number of the device;
2) the date the 90-day examination was conducted; and
3) the name of the person who conducted the 90-day

examination.

B. Quarterly Hands-On Donning Procedures Training

CMS&H personnel assigned to perform underground inspection and investigation activities should be provided hands-on training each 90 day period in the correct donning procedures for the self-rescue device(s) assigned to them.

The hands-on training should include a course of instruction and demonstration in the use, care, and maintenance of each type of self-rescue device provided for use in the district. The training shall include instruction in the complete donning procedure in which each miner assumes a donning position, opens the device, activates the device, inserts the mouthpiece or simulates this task while explaining proper insertion of the mouthpiece, and puts on the nose clip.

> NOTE: Due to health-related concerns, CMS&H personnel should be instructed to simulate insertion of the mouth piece and verbalize the procedure for inserting the mouth piece.

In addition, the self-rescuer training program should include provisions for ensuring that all CMS&H employees are adequately trained in each of the elements included in the manufacturer's approved instruction manual regarding the proper use, care, maintenance, and donning of a self-rescue device. The training should conform to the instructions contained in the manufacturer's approved manual for each type of device provided for use in the district.

A record of the required hands-on training for each individual should be maintained at the assigned duty station of the individual. The record should specify:

1) the name of the CMS&H employee;
2) the date the hands-on training was provided;
3) who conducted the hands-on training; and
4) the type of device(s) used in the training.

Investigating and Reporting Problems With Self-Rescue Devices

Each CMS&H District should implement procedures to provide reasonable assurance that all reported incidents involving self-rescue devices are thoroughly investigated in a timely manner.

As a minimum, these procedures should include the process the district will follow in: 1) investigating reported incidents involving the adequacy of self-rescue devices; and 2) training all enforcement personnel to ensure the inspectors understand the procedures and know what is expected.

The procedures should include the responsibility of the: 1) inspector in investigating the incident; 2) inspection supervisor in assessing the seriousness of the incident; and 3) the district in reporting the incident to CMS&H Headquarters, Division of Health, or Technical Support.

The following information should be considered in determining if the incident is of a serious nature.

1. Were persons injured as a result of the incident?

   If so, the inspector should determine the nature of the injury and how many people were injured.

2. What caused the incident to occur?

   The inspector should include a description of the events leading up to the incident.

3. Did a self-rescue device fail to function as designed?

   If so, the inspector should document the following: 1) the type of device(s) that failed; 2) the number of affected device(s); and 3) the nature of the failure. In identifying the nature of the failure the inspector should include a description of what occurred.

4. Were the affected persons provided with the required self-rescuer training within the last 12-month period?

   If not, the inspector should document the last recorded date of the required training and take appropriate enforcement

action.

5. Were the affected devices stored, used, and inspected in accordance with the manufacturer's approved condition of use requirements?

   If not, the inspector should document how this determination was made and take appropriate enforcement action.

The district procedures should include a process for reporting incidents of a serious nature.

All incidents involving the following situations are considered serious and should be reported to Headquarters, Division of Health, at (703) 235-1358, or MSHA Technical Support at (703) 235-1580 as soon as possible:

1. an injury to a miner while using a self-rescue device;

2. failure of a self-rescue device to perform as designed; and/or

3. an incident that resulted in a need for five or more miners to don their self-rescue device to escape to a safe location.

Item 3 applies even if there were no reported injuries and the self-rescue devices performed as designed. Upon being informed of such an incident, Headquarters will determine if there is a need to interview the miners to gather comprehensive information that would be useful in escape and evacuation training of miners.

Self-Rescuer Survey Data

U.S. Department of Labor
Mine Safety and Health Administration

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1. Dates of Survey: Start:___/___/___ End:___/___/___
2. MSHA Office Code:_____
3. Inspector AR Number: _____
4. Supervisor Initial:_____
5. Mine ID Number: ____-_____
6. Mine Name: _____
7. Company Name:_____
8. Total Number of Underground Miners:_____; and By Shift:
   (a) Midnight/Owl/1st:__ Start Time:___:___ Quit Time:___:___
   (b) Day/2nd: __ Start Time:___:___ Quit Time:___:___
   (c) Aft/Eve/3rd: __ Start Time:___:___ Quit Time:___:___
   (d) Staggered/Overlapping/Extended Shifts: enter maximum number of miners underground at any given time: _____; and average length of shift in hours_____Hrs.
   (e) Scheduled production days: 1)Mon.__; 2)Tue.__; 3)Wed.__; 4)Thur.__; 5)Fri.__; 6)Sat.__; and 7)Sun.__.
9. For each type of self-rescue device provided for use at the mine enter the quantity in the appropriate block:
   (a) CSE: SR-100 SCSR Quantity: _____
   (b) MSA: Life Saver 60 SCSR Quantity: _____
   (c) Draeger: OXY K Plus SCSR Quantity: _____
   (d) Ocenco: EBA 6.5 SCSR Quantity: _____
   (e) MSA: W65 FSR Quantity: _____
   (f) Ocenco: M-20 SCSR Quantity: _____
   (g) Other: Specify _____ Quantity: _____
10. Is a record available at the mine to document that the mine operator is conducting the required 90-day examinations on each of the self-rescue devices provided for use at the mine? Y __ N __
11. Does the mine have an approved SCSR storage plan in effect allowing miners to be further than 25 feet from their 1-hour SCSR? Y __ N __ If Yes, (a) distance from the face to the storage cache in feet;____ft. and (b) Are devices stored in accordance with the manufacturer's approved requirements? Y __ N __

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MSHA Form 2000-220 (March 2000 Revised)

12. Are self-rescue devices stored on mining equipment? Y__ N __ If Yes, check each appropriate block to identify the type of mining equipment. Further, using **Items 9 (a) through (g)** above, identify the type of self-rescue devices observed on the mining equipment.

Type(s) Of Mining Equipment:	**Type(s)Of Self-Rescue Devices:**
(a)__ Continuous Miner	___;___;___;___;___;___;___
(b)__ Shuttle Car	___;___;___;___;___;___;___
(c)__ Roof Bolter	___;___;___;___;___;___;___
(d)__ Scoop Car	___;___;___;___;___;___;___
(e)__ Longwall Shield	___;___;___;___;___;___;___
(f)__ Personnel Carrier	___;___;___;___;___;___;___
(g)__ Locomotive	___;___;___;___;___;___;___
(h)__ Other: Specify_____	___;___;___;___;___;___;___

Are Self-Rescue Devices: (i) Secured on the mining equipment? Y__ N__; (j) Protected from accidental damage? Y__ N__; and (k) Left on equipment between shifts? Y__ N__.

13. What is the average mining height, in inches, of the primary escapeway? _____ inches.

14. Using the primary escapeway what is the distance, in feet, from the deepest working section in the mine to the surface or bottom of an emergency escape facility? _____ feet.

15. Does the mine provide SCSRs at strategic locations for the purpose of providing protection to the surface or a safe location? Check Y __ N __ If yes: (a) is the location of these SCSRs approved by the district manager? Y __ N __

Comments:_____

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MSHA Form 2000-220 (March 2000 Revised)

Instructions For Completing MSHA Form 2000-220

(March 2000 Revised)

Item 1. Enter the start and end dates of the survey. If the survey only took one day, only one date is needed.

Item 2. Enter the office code of the MSHA office that has inspection jurisdiction for the identified mine.

Item 3. Enter AR Number of inspector who conducted the survey.

Item 4. The supervisor assigned inspection responsibility for this mine should review the form for legibility and completeness and then initial this block.

Item 5. Enter the 7-digit Legal ID Number.

Item 6. Enter the Mine Name as shown in the Legal ID.

Item 7. Enter the Company Name as shown in the Legal ID.

Item 8. Enter the total number of miners who work underground; then enter the number of miners by shift in the block corresponding to the appropriate shift, and enter the starting and quitting time of each shift. Items (a), (b), and (c) should be completed for all mines that do not work a staggered, overlapping, or extended shift, even if coal is produced on only one or two shifts. If the mine works a staggered, overlapping, or extended shift, only item (d) should be checked. Enter the maximum number of miners underground at any given time, and the average length of the shift in hours. Item (e) pertains to scheduled production shifts only and should be completed for all mines by placing a check after the appropriate days of the week.

Item 9. Enter the quantity in use for each type of self-rescue device provided for use at a mine. Item (g) should only be completed if a mine is using a self-rescue device that is not on the list of approved devices. **(NOTE: the quantity of each type of self-rescue device should equal the number documented on the Self-Rescuer Survey Data Sheet.)**

Item 10. Check the appropriate response: either Yes or No.

Instructions For Completing MSHA Form 2000-220 (March 2000 Revised)

Item 11. Check the appropriate response: either Yes or No. If the mine has an approved plan but the plan is not in effect, the No block should be checked. If the yes block is checked, enter the travel distance, in feet, from the furthest face to the section storage cache in item (a). If the approved plan stipulates a time (5 minutes) rather than a distance, the inspector should use the time/height and distance chart in the Program Policy Manual under 75.1714-1 to convert the time to feet.

Item 12. This applies only to devices that are stored on mining equipment and not removed from the equipment between shifts. Check the appropriate response: either Yes or No. This applies to all types of self-rescue devices. If an inspector observes any self-rescue device being stored on any type of mining equipment, the Yes block should be checked and Item 11 completed as follows:

Check the appropriate block(s), Item(s) (a) through (h), to identify the type(s) of mining equipment the self-rescue devices were stored on.

Identify the type(s) of self-rescue devices stored on the mining equipment by entering the appropriate letter from Item 9(a) through (g) after the type of mining equipment. If a self-rescuer is being stored on a piece of mining equipment that is not identified by name, Item (h) should be completed specifying the type of affected mining equipment.

Check the appropriate Yes or No box for Items (i), (j), and (k). The yes block should only be checked if the devices are secured in a manner that would prohibit them from being accidently dislodged from the equipment and protected from accidental damage, such as a box or some sort of protective cover.

Item 13. Enter the average mining height in inches for the primary intake air escapeway. Where the mining height varies significantly, the inspector should figure the overall average mining height in inches and enter only one figure.

Instructions For Completing MSHA Form 2000-220 (March 2000 Revised)

Item 14. Enter the total distance in feet from the deepest working section in the mine by following the primary escape route to the surface. If the miners cannot exit to the surface via the primary escape route, the inspector should enter the distance to the bottom of the emergency escape facility.

Item 15. If a mine operator provides any SCSR devices at strategic locations for the purpose of providing protection to the surface or a safe location, the Yes block should be checked. This applies to SCSR devices other than those located in the section storage cache as specified in the approved SCSR storage plan allowing miners to be more than 25 feet from their one-hour SCSR. If the Yes block is checked, the inspector should determine if the district manager has approved the location of these devices and check the appropriate block for item (a) Yes or No.

The data on MSHA Form 2000-220 (March 2000 Revised) and the Self-Rescuer Survey Data Sheet will be entered in a national database. Accordingly, it is essential that all appropriate items be completed, and that the information be legible and accurate, as determined at the time of the inspection.

Copies of MSHA Form 2000-220 (March 2000 Revised) and the Self-Rescuer Survey Data Sheet should be:

1. maintained with the completed inspection report;

2. filed in the Uniform Mine File Notebook for the affected mine behind the tab marked Fire Fighting and Evacuation; and

3. sent to Headquarters by July 15 each year or upon completion of the information for a newly opened mine.

Self-Rescuer Survey Data Sheet

Mine ID: ____ - _____ Survey Date(s): __ / __ / ____ to ___ / ____ / ____

Mine Name: _____

Company Name: _____

Model Number	Serial Number	Date of Manufacture	Method of Deployment **

** Acceptable Values: Cached/Stored - Underground
Carried/Worn
Machine Mounted
Warehoused - Surface

INSTRUCTIONS FOR COMPLETING SELF-RESCUER SURVEY DATA SHEET

Mine ID: Enter the 7-digit Legal ID Number.

Mine Name: Enter the Mine Name as shown in the Legal ID.

Company Name: Enter the Company Name as shown in the legal ID.

Survey Date(s): Enter the date(s) on which the survey was conducted.

Model Number: Enter the Model No. of each self-rescue device provided for use at a mine. It is only necessary that the Model No. be entered one time as long as the type of device remains the same.

Serial Number: Enter the serial number for each self-rescue device provided for use at a mine.

Date of Manufacture: Enter the Date of Manufacture for each self-rescue device corresponding to the serial number.

Deployment: Enter the Method of Deployment for each self-rescue device identified. Chose from one of the four Methods listed below.

Cached/Stored: Use this method only for devices that are located in underground areas of a mine.

Carried/Worn: Use this method only for devices that are either worn or carried by the miners.

Machine Mounted: Use this method only for devices that are stored on mining or transportation equipment.

Warehoused: Use this method only for devices that are stored or warehoused on the surface.

If it is determined that the above methods of deployment do not accurately identify how the self-rescue devices are being deployed at a particular mine, the district should contact Headquarters, Division of Health, at (703) 235-1358 to discuss other options.

CONTENTS

SELF-RESCUER DAILY AND 90-DAY INSPECTION REQUIREMENTS SERVICE-LIFE EXPIRATION DATE AND CONDITIONS OF USE REQUIREMENTS

NOTE: This Handbook only contains the information that MSHA inspection personnel will be using in evaluating the self-rescue devices in use at a mine. The manufacturer's MSHA/NIOSH approved user's manual contains more detailed information and should be used to resolve any conflicts with the MSHA recommended inspection procedures.

MANUFACTURER

CSE Corporation

Phone: (412) 856-9200

CSE SR-100 SCSR

MSHA RECOMMENDED DAILY INSPECTION PROCEDURES:

A daily examination must be conducted on each device being carried underground prior to the beginning of each shift.

1. Remove all excess dirt, oil, and grease from the carrying pouch and the outer case of the device.

2. Remove the device from the carrying pouch. The device should slip out of the carrying pouch easily. This should be accomplished by the use of only one hand. If you experience difficulty in getting the device out of the carrying pouch, you should make another check for excess dirt. If you are still experiencing a problem, you should obtain another device or another carrying pouch.

3. Check the moisture indicators located on both the top and bottom canister covers. Both indicators must be blue. If either of the moisture indicators contains any white or pink the device must be removed from service. If either moisture indicator changes color during the shift, the device may remain in service during the remainder of that shift.

4. Check the security band. This is the band that is attached to the bottom canister cover, goes over the top canister cover, and attaches back to the bottom canister cover. If the security seal is slack or shows signs of being damaged, the device must be removed from service.

5. Check the canister body and the top and bottom covers for any signs of physical abuse that may affect the ability of the device to function as designed or has affected the seals on either the top or bottom cover. If the device shows signs of being crushed, or dented to the extent that the security band has become slack, or the seals on the top or bottom covers have been breached, the device must be removed from service. In addition, if the device shows signs of being exposed to excessive heat such as burnt marks on the canister cover, or has visible holes or cracks in the canister cover, or has severe dents in the top or bottom cover, the device must be removed from service.

NOTE: A record of the daily examination is not required unless a device was required to be removed from service.

CSE SR-100 SCSR

MSHA RECOMMENDED 90-DAY INSPECTION PROCEDURES:

Each SCSR device provided for use at a mine must be examined at least every 90 days to ensure that the device is ready for use in the event of an emergency.

The 90-day examination procedure for the CSE SR-100 SCSR device is the same as the daily examination procedure with the exception of the record. A record of the 90-day examination must be kept at the mine site. The record must include the date the last 90-day examination was conducted on each device, and the name of the person who conducted the examination. Such record must be made available upon request.

Failure to conduct the 90-day examination, or to maintain a record of the date and the name of the person who conducted the last 90-day examination, may result in a device(s) being removed from service and appropriate enforcement action being taken.

Devices that are removed from service due to lack of adequate documentation of the 90-day examination may be placed back in service upon passing a 90-day examination and a record being made of the date of the examination and the name of the person who conducted the examination.

Service-Life Expiration Date:

The service-life for the CSE SR-100 is 10 years from the date of manufacture, as long as the device passes the daily and/or 90-day examination requirements. The date of manufacture is permanently stamped on the security band. To determine the service-life expiration date, simply add 10 years to the manufacture date.

Once a device reaches the manufacturer’s NIOSH/MSHA approved service-life expiration date it is no longer considered an approved device and must be removed from service. Failure to remove the device from service upon the device reaching its approved service-life expiration date may result in appropriate enforcement action being taken.

CONDITIONS OF USE REQUIREMENTS:

1. The device must pass the daily and 90-day inspection requirements. Accordingly the device must have a moisture indicator on both the top and bottom canister covers.

2. The device must be within the manufacturer's approved service-life expiration date.

3. The device should only be used for escape purposes.

4. The device should not be stored at temperatures below 32^{o} F for extended periods of time. If the temperature of the device is below 32^{o} F, it should be removed from service. The device may be placed back in service once the temperature of the device is above 32^{o} F.

5. The device should not be stored in areas where it may be exposed to temperatures above 130^{o} F. If a device is stored in an area where it may have been exposed to temperatures above 130^{o} F, the elastomeric parts may fail and the device may not function as designed. Accordingly, the device should be removed from service and returned to CSE for service.

The manufacturer's approved user's manual contains more detailed information and should be used to resolve any conflict that may arise from enforcing the MSHA recommended daily and 90-day examination requirements.

MANUFACTURER

NATIONAL DRAEGER

Phone: (412) 787-8383

AUTHORIZED DISTRIBUTER

NATIONAL MINE SERVICE

Phone: (724) 463-4438

DRAEGER OXY K PLUS SCSR

MSHA RECOMMENDED DAILY INSPECTION PROCEDURES:

A daily examination must be conducted on each device being carried underground prior to the beginning of each shift.

The OXY K PLUS is designed to be carried on the belt. If the device is placed in a carrying pouch, the user should remove the device from the pouch and conduct the following examination.

1. Check the red seal located on the top of the device. If the seal is damaged or not in place, the device should be removed from service.

2. Check the seal between the lid and back cover of the device. If the lid is not closed securely, the device should be removed from service.

3. Check the outer housing of the case. If this examination reveals any cracks, holes, or other damage deeper than 1.5 mm (.059 inches), the device should be removed from service.

4. Check the moisture indicator. The indicator should be deep blue in color. If more than 50 percent of the particles in the moisture indicator have changed color from deep blue to light blue or clear, the device should be removed from service.

NOTE: A record of the daily examination is not required unless a device is required to be removed from service.

MSHA RECOMMENDED 90-Day INSPECTION PROCEDURES:

Each SCSR device provided for use at a mine must be examined at least every 90 days to ensure that the device is ready for use in the event of an emergency.

The 90-day examination procedure for the OXY K PLUS SCSR is the same as the daily examination procedure with the exception of the record. A record of the 90-day examination must be kept at the mine site. The record must include the date the last 90-day examination was conducted on each device, and the name of the person who conducted the examination. Such record must be made available upon request.

Failure to conduct the 90-day examination, or to maintain a record of the date and the name of the person who conducted the last 90-day examination, may result in a device(s) being removed from service and appropriate enforcement action being taken.

Devices that are removed from service due to lack of adequate documentation of the 90-day examination may be placed back in service upon passing a 90-day examination and a record being made of the date of the examination and the name of the person who conducted the examination.

Service-Life Expiration Date:

The service-life for the Draeger OXY K Plus is: 1) 5 years from the delivery date if carried, with a service life extension of 5 additional years if the device is serviced by an authorized Draeger service center; and 2) 10 years from the delivery date if the device is placed in a safe storage location. The delivery date, and/or factory service date is indelibly marked on the back of the device. To determine the service-life expiration date, simply add 5 years to the delivery date or factory service date if carried and 10 years if stored.

The service-life expiration date applies only if a device will pass the daily and/or 90-day examination requirements. It is MSHA’s position that if a device has ever been carried, the 5 year service life must apply even though the device was later placed in a safe storage location.

Once a device reaches the manufacturer’s NIOSH/MSHA approved service-life expiration date it is no longer considered an approved device and must be removed from service. Failure to remove the device from service upon reaching the approved service-life expiration date may result in appropriate

enforcement action being taken.

CONDITIONS OF USE REQUIREMENTS:

1. The device must pass the daily and 90-day inspection requirements. Accordingly 50 percent or more of the moisture indicator located on the top of the device must be dark blue in color.

2. The device must be within the manufacturer's approved service-life expiration date.

3. The device should only be used for escape purposes.

4. The device should not be stored at temperatures below 23^{o} F for extended periods of time. If the temperature of the device is below 23^{o} F, it should be removed from service. The device may be placed back in service once the temperature of the device is above 23^{o} F.

5. The device should not be stored in areas where it may be exposed to temperatures above 122^{o} F. If a device is stored in an area where it may have been exposed to temperatures above 122^{o} F, the elastomeric parts may fail and the device may not function as designed. Accordingly, the device should be removed from service and returned to Draeger for service.

The manufacturer's approved user's manual contains more detailed information and should be used to resolve any conflict that may arise from enforcing the MSHA recommended daily and 90-day examination requirements.

Draeger 810 FSR

MSHA RECOMMENDED DAILY INSPECTION PROCEDURES:

A daily examination must be conducted on each device being carried underground prior to the beginning of each shift.

1. Remove all excess dirt, oil, and grease from the carrying pouch and the outer case of the device.

2. Remove the device from the carrying pouch. The device should slip out of the carrying pouch easily. This should be accomplished by the use of only one hand. If you experience difficulty in getting the device out of the carrying pouch, you should make another check for excess dirt. If you are still experiencing a problem, you should obtain another device, or another carrying pouch.

3. Check the vacuum seal for tightness by grasping the bottom half of the canister in one hand and the top half in the other hand and twist in opposite directions. If the seal is weak, the device will pop open. In such cases, the device must be removed from service.

NOTE: A record of the daily examination is not required unless a device was required to be removed from service.

MSHA RECOMMENDED 90-DAY INSPECTION PROCEDURES:

Each FSR device provided for use at a mine must be examined at least every 90 days to ensure that the device is ready for use in the event of an emergency.

The 90-day examination procedures for the Draeger 810 FSR device are the same as the daily examination procedures with the exception of the record. A record of the 90-day examination must be kept at the mine site. The record must include the date the last 90-day examination was conducted on each device and the name of the person who conducted the examination. Such record must be made available upon request.

Failure to conduct the 90-day examination, or to maintain a record of the date and the name of the person who conducted the last 90-day examination, may result in a device(s) being removed from service and appropriate enforcement action being taken.

Devices that are removed from service due to lack of adequate documentation of the 90-day examination may be placed back in service upon passing a 90-day examination and a record being made of the date of the examination and the name of the person who conducted the examination.

Service-Life Expiration Date:

The service-life for the Draeger 810 FSR device is 5 years from the shipped date, or 6 years from the date of manufacture, as long as the device passes the daily and/or 90-day examination requirements. The expiration date is printed on the bottom of the device by the manufacturer.

Once a device reaches the manufacturer’s NIOSH/MSHA approved service-life expiration date, it is no longer considered an approved device and must be removed from service. Failure to remove the device from service upon the device reaching its approved service-life expiration date may result in appropriate enforcement action being taken.

CONDITIONS OF USE REQUIREMENTS:

1. The device must pass the daily and 90-day inspection requirements.

2. The device must be within the manufacturer's approved service-life expiration date.

3. The device should only be used for escape purposes.

4. The device is not suitable for use in atmospheres where the oxygen content is insufficient for human respiration.

5. The device should only be worn on the waist belt. It should never be stored on mining equipment or in other areas where it would be exposed to excessive heat and vibration.

6. The manufacturer does not specify the temperatures at which a device may be stored and be expected to function as designed. However, it is MSHA's position that the Draeger 810 FSR device should never be stored in areas where it may be exposed to temperatures below 20^0 F or above 140^0 F for extended periods of time.

NOTE: If the Draeger 810 FSR device has been exposed to temperatures below 20^0 F for an extended period of time, it should continue to function. However, in such cases, the device should be removed from service until it has returned to a temperature above 20^0 F. If the Draeger 810 FSR device has been exposed to temperatures above 140^0 F, the elastomeric parts may begin to fail. Accordingly, the device should be removed from service. In such cases, the manufacturer should be contacted and asked to provide guidance on what to do with the device. Since this is not covered in the NIOSH/MSHA approval, no enforcement action should be taken. Every effort should be made to discuss this with the mine operator and miners to ensure they understand that the device may not function as designed. Further, upon returning to the MSHA office the MSHA supervisor should be informed of the potential problem. The supervisor should then contact MSHA Technical Support at (703) 235-1580. MSHA Technical Support will determine if there is a need to conduct a follow-up investigation.

The manufacturer's approved user's manual contains more detailed information, and should be used to resolve any conflict that may arise from enforcing the MSHA recommended daily and 90-day examination requirements.

Draeger 910 FSR

MSHA RECOMMENDED DAILY INSPECTION PROCEDURES:

A daily examination must be conducted on each device being carried underground prior to the beginning of each shift.

1. Remove all excess dirt, oil, and grease from the carrying pouch and the outer case of the device.

2. Remove the device from the carrying pouch. The device should slip out of the carrying pouch easily. This should be accomplished by the use of only one hand. If you experience difficulty in getting the device out of the carrying pouch, you should make another check for excess dirt. If you are still experiencing a problem, you should obtain another device, or another carrying pouch.

3. Check the case for obvious external damage such as large dents in the case or damage to the seal area. If any damage is observed, or the seal is damaged, the device must be removed from service.

NOTE: A record of the daily examination is not required unless a device was required to be removed from service.

MSHA RECOMMENDED 90-DAY INSPECTION PROCEDURES:

Each FSR device provided for use at a mine must be examined at least every 90 days to ensure that the device is ready for use in the event of an emergency.

The following 90-day examination procedure must be complied with when examining the Draeger 910 FSR device.

1. Remove all excess dirt, oil, and grease from the carrying pouch and the outer case of the device.

2. Remove the device from the carrying pouch. The device should slip out of the carrying pouch easily. This should be accomplished by the use of only one hand. If you experience difficulty in getting the device out of the carrying pouch, you should make another check for excess dirt. If you are still experiencing a problem, you should obtain another device, or another carrying pouch.

3. Check the case for obvious external damage such as large dents in the case or damage to the seal area. If any damage

is observed, or the seal is damaged, the device must be removed from service.

4. Check the weight of the device on an acceptable scale. A device that has a weight gain in excess of 10 grams from the initial weight must be removed from service. The initial weight, in grams, is embossed on the bottom of the container. If the initial weight is not legible, the device should be removed from service, unless the previous 90-day examination record documents the initial weight of the device in question.

A record of the 90-day examination must be kept at the mine site. The record must include the date the last 90-day examination was conducted on each device and the name of the person who conducted the examination. Such record must be made available upon request.

Failure to conduct the 90-day examination, or to maintain a record of the date and the name of the person who conducted the last 90-day examination, may result in a device(s) being removed from service and appropriate enforcement action being taken.

A device that is removed from service due to lack of adequate documentation of the 90-day examination may be placed back in service upon passing a 90-day examination and a record being made of the date of the examination and the name of the person who conducted the examination.

Service-Life Expiration Date:

The service-life for the Draeger 910 FSR device is 5 years from the shipped date, or 6 years from the date of manufacture, as long as the device passes the daily and/or 90-day examination requirements. The expiration date is printed on the bottom of the device by the manufacturer.

Once a device reaches the manufacturer's NIOSH/MSHA approved service-life expiration date, it is no longer considered an approved device and must be removed from service. Failure to remove the device from service upon the device reaching its approved service-life expiration date may result in appropriate enforcement action being taken.

CONDITIONS OF USE REQUIREMENTS:

1. The device must pass the daily and 90-day inspection requirements.

2. The device must be within the manufacturer's approved service-life expiration date.

3. The device should only be used for escape purposes.

4. The device is not suitable for use in atmospheres where the oxygen content is insufficient for human respiration.

5. The device should only be worn or carried by a person. It should never be stored on mining equipment or in other areas where it would be exposed to excessive heat and vibration.

6. The manufacturer does not specify the temperatures at which a device may be stored and be expected to function as designed. However, it is MSHA's position that the Draeger 910 FSR device should never be stored in areas where it may be exposed to temperatures below 20^0 F or above 140^0 F for extended periods of time.

NOTE: If the Draeger 910 FSR device has been exposed to temperatures below 20^0 F for an extended period of time, it should continue to function. However, in such cases, the device should be removed from service until it has returned to a temperature above 20^0 F.

If the Draeger 910 FSR device has been exposed to temperatures above 140^0 F, the elastomeric parts may begin to fail. Accordingly, the device should be removed from service. In such cases, the manufacturer should be contacted and asked to provide guidance on what to do with the device.

Since this is not covered in the NIOSH/MSHA approval, no enforcement action should be taken. Every effort should be made to discuss this with the mine operator and miners to ensure they understand that the device may not function as designed. Further, upon returning to the MSHA office the MSHA supervisor should be informed of the potential problem. The supervisor should then contact MSHA Technical Support at (703) 235-1580. MSHA Technical Support will determine if there is a need to conduct a follow-up investigation.

MANUFACTURER

Mine Safety Appliances Company

(MSA)

Phone: (412) 967-3430

MSA LIFE-SAVER 60 SCSR

MSHA RECOMMENDED DAILY INSPECTION PROCEDURES:

A daily examination must be conducted on each device being carried underground prior to the beginning of each shift.

1. Remove all excess dirt, oil, and grease from the device.

2. If the device is attached to the miner's belt or harness support system by the use of the swivel-pivot adapter, remove the device from the belt or harness. If the device is being worn or carried in a pouch, remove the device from the carrying pouch. The device should slip out of the carrying pouch easily. This should be accomplished by the use of only one hand. If you experience difficulty in getting the device out of the carrying pouch, you should make another check for excess dirt. If you are still experiencing a problem, you should obtain another device, or another carrying pouch.

3. Check the moisture indicator located on the top canister cover. The moisture indicator on the Life-Saver 60 SCSR should show half-pink and half-blue. If the moisture indicator shows a solid (pink) the device must be removed from service. If the moisture indicator changes color during the shift, the device may remain in service during the remainder of that shift. The moisture indicator can be viewed without removing the shock absorbing protective rubber cover which must be provided on the device if it is being worn, carried, or stored on equipment.

4. Check the security band. This is the band that goes around the perimeter of the device and is attached on the top under the protective rubber cover. For the daily examination it is not necessary to remove the protective rubber cover. If the security band is slack, the device must be removed from service.

5. Check the canister body for any sign of physical abuse that may affect the ability of the device to function as designed or has affected the seal between the canister and the top cover. If the device shows signs of being crushed, or dented to the extent that the security band has become slack, or the seal between the canister body and top cover has been breached, the device must be removed from service.

In addition, if the device shows signs of being exposed to excessive heat such as burnt marks on the canister cover, or visible holes or cracks in the canister cover, or severe dents in the top cover, (greater than the diameter of a dime) the device must be removed from service.

NOTE: A record of the daily examination is not required unless a device was required to be removed from service.

MSHA RECOMMENDED 90-DAY INSPECTION PROCEDURES:

Each SCSR device provided for use at a mine must be examined at least every 90 days to ensure that the device is ready for use in the event of an emergency.

In addition to the daily examination requirement, the 90-day examination procedure for the Life-Saver 60 SCSR device require the examiner to remove the protective rubber cover and check the led seal located on the top of the security band under the protective rubber cover. The led seal holds the two ends of the security band together and is required in order to help prevent the device from being opened inadvertently. If the led seal is missing, the device must be removed from service.

In addition, a record of the 90-day examination must be kept at the mine site. The record must include the date the last 90-day examination was conducted on each device and the name of the person who conducted the examination. Such record must be made available upon request.

Failure to conduct the 90-day examination, or to maintain a record of the date and the name of the person who conducted the last 90-day examination, may result in a device(s) being removed from service and appropriate enforcement action being taken.

Devices that are removed from service due to lack of adequate documentation of the 90-day examination may be placed back in service upon passing a 90-day examination and a record being made of the date of the examination and the name of the person who conducted the examination.

Service-Life Expiration Date:

The service life for the Life-Saver 60 is 10 years from the date of manufacture, as long as the device passes the daily and/or 90-day examination requirements. The date of manufacture is permanently stamped on the security band. To determine the service-life expiration date, simply add 10 years to the manufacture date.

Once a device reaches the manufacturer's NIOSH/MSHA approved service-life expiration date, it is no longer considered an approved device and must be removed from service. Failure to remove the device from service upon the device reaching its approved service-life expiration date may result in appropriate enforcement action being taken.

CONDITIONS OF USE REQUIREMENTS:

1. The device must pass the daily and 90-day inspection requirements.

2. The device must be within the manufacturer's approved service-life expiration date.

3. The device should only be used for escape purposes.

4. The device should not be stored at temperatures below 27^{o} F for extended periods of time. If the temperature of the device is below 27^{o} F, it should be removed from service. The device may be placed back in service once the temperature of the device is above 27^{o} F.

5. The device should not be stored in areas where it may be exposed to temperatures above 120^{o} F. If a device is stored in an area where it may have been exposed to temperatures above 130^{o} F, the elastomeric parts may fail and the device may not function as designed. Accordingly, the device should be removed from service and returned to MSA for service.

The manufacturer's approved user's manual contains more detailed information and should be used to resolve any conflict that may arise from enforcing the MSHA recommended daily and 90-day examination requirements.

MSA W65 FSR

MSHA RECOMMENDED DAILY INSPECTION PROCEDURES:

A daily examination must be conducted on each device being carried underground prior to the beginning of each shift.

1. Remove all excess dirt, oil, and grease from the outer case of the device.

2. Check the solder seal on the red lever on the top of the device. If the solder seal is broken or missing, the device must be removed from service even though it does not appear to have been opened.

3. Visually check the case for any dents or abrasions that may have produced a hole or affected the seal. If the visual examination reveals any obvious signs that the device may not function as designed, the device should be taken out of service.

If a device is taken out of service as a result of the visual examination, the operator may conduct both the immersion and weight test as outlined below under the 90-day inspection procedure. If the device passes both the immersion and weight test, the device may be placed back in service. However, it should be noted that MSHA does not recommend this practice. If the daily exam shows obvious signs of damage, the damage cannot be repaired. Accordingly, it would be necessary to conduct both the immersion and weight test on the device daily in order to allow the device to remain is service.

NOTE: A record of the daily examination is not required unless a device was required to be removed from service.

MSHA RECOMMENDED 90-DAY INSPECTION PROCEDURES:

Each FSR device provided for use at a mine must be examined at least every 90 days to ensure that the device is ready for use in the event of an emergency.

The following 90-day examination procedure must be complied with when examining the MSA W65 FSR device.

1. Remove all excess dirt, oil, and grease from the outer case of the device.

2. Check the solder seal on the red lever on the top of the device. If the solder seal is broken or missing, the device must be removed from service even though it does not appear to have been opened.

3. Completely immerse the device in warm clear water to check for airtightness of the seal. If any bubbles are observed coming from the seal area, the device must be removed from service.

4. Check the weight of the device on an acceptable scale. Any device that has a weight gain in excess of 10 grams from the initial weight must be removed from service. The initial weight, in grams, is embossed on the bottom of the canister. If the initial weight is not legible, the device should be removed from service unless the previous 90-day examination record documents the initial weight of the device in question.

NOTE: Prior to checking the weight of the device it is important that all excess dirt and water be removed from the outer case. In addition, any paint or stickers that may have been applied to the case should also be removed. A record of the 90-day examination must be kept at the mine site. The record must include the date the last 90-day examination was conducted on each device and the name of the person who conducted the examination. Such record must be made available upon request. Failure to conduct the 90-day examination, or to maintain a record of the date and the name of the person who conducted the last 90-day examination, may result in a device(s) being removed from service and appropriate enforcement action being taken. A device that is removed from service due to lack of adequate documentation of the 90-day examination may be placed back in service upon passing a 90-day examination and a record being made of the date of the examination and the name of the person who conducted the examination.

Service-Life Expiration Date:

The service-life for the MSA W65 FSR device is 15 years from the date of manufacture, or 10 years from the in-service date, whichever is less.

The W65 FSRs manufactured prior to 1992 do not have a date of manufacture etched into the case. These devices have a serial number etched into the case. A W65 FSR device with a serial number that begins with the following two letter combinations followed by a number are still within the 15-year maximum service life.

Serial No.	Mfg. Date	Serial No.	Mfg. Date
CL through CO	1984	CP through CR	1985
CS through CU	1986	CV	1987
CW through CY	1988	CZ and DA through DD	1989
DE through DH	1990	DI through DM	1991
DN through DO	1992		

However, if these devices have been in service for more than 10 years, they are no longer approved and must be removed from service. The in-service date is placed on the bottom of the device by the mine operator. To determine the service-life expiration date, you need to add 10 years to the in-service date. If the in-service date is not etched into the case, you should add 10 years to the manufacture date.

If the manufacture date and the in-service date are illegible, the device should be removed from service, unless the previous 90-day examination record documents these dates and the service-life has not expired.

If an MSA W65 FSR device has a serial number that begins with one letter followed by a number, the device is no longer approved and must be removed from service. In addition, if a device has a serial number that begins with the following two-letter combinations followed by a number, the device has exceeded the maximum 15 year service-life expiration date and must be removed from service.

Serial No.
AA through AZ
BA through BZ
CA through CK

In addition, an MSA W65 FSR device with a serial number beginning with the letters **CJ** through **CR** were required to be retrofitted by the manufacturer, MSA. Devices that were retrofitted by MSA can be identified by the letter "**I**" which was etched in front of the original weight by MSA. Any W65 bearing a serial number beginning with the letters **CL** through **CR** that does not have the letter "**I**" etched in front of the original weight is not an approved device and must be removed from service.

Note: As outlined above, the service-life expiration date has been exceeded on devices beginning with the letter **CJ** and **CK**.

Once a device reaches the manufacturer's NIOSH/MSHA approved service-life expiration date, it is no longer considered an approved device and must be removed from service. Failure to remove the device from service upon the device reaching its approved service-life expiration date may result in appropriate enforcement action being taken.

CONDITIONS OF USE REQUIREMENTS:

1. The device must pass the daily and 90-day inspection requirements.

2. The device must be within the manufacturer's approved service-life expiration date.

3. The device should only be used for escape purposes.

4. The device is not suitable for use in atmospheres where the oxygen content is insufficient for human respiration.

5. The manufacturer does not specify the temperatures at which a device may be stored and be expected to function as designed. However, it is MSHA's position that the MSA W65 FSR should never be stored in areas where it may be exposed to temperatures below 20^0 F or above 140^0 F for extended periods of time.

Note: If the W65 FSR device has been exposed to temperatures below 20^0 F for an extended period of time, it should continue to function. However, in such cases the device should be removed from service until it has returned to a temperature above 20^0 F.

If the W65 FSR device has been exposed to temperatures above 140^0 F, the elastomeric parts may begin to fail. Accordingly, the device should be removed from service. In such cases, the manufacturer should be contacted and asked to provide guidance on what to do with the device.

Since this is not covered in the NIOSH/MSHA approval, no enforcement action should be taken. Every effort should be made to discuss this with the mine operator and miners to ensure they understand that the device may not function as designed. Further, upon returning to the MSHA office the MSHA supervisor should be informed of the potential problem. The supervisor should then contact MSHA Technical Support at (703) 235-1580. MSHA Technical Support will determine if there is a need to conduct a follow-up investigation.

The manufacturer's approved user's manual contains more detailed information and should be used to resolve any conflict that may arise from enforcing the MSHA recommended daily and 90-day examination requirements.

MANUFACTURER

OCENCO, INCORPORATED

Phone: (414) 947-9000

OCENCO EBA 6.5 SCSR

MSHA RECOMMENDED DAILY INSPECTION PROCEDURES:

A daily examination must be conducted on each device being carried underground prior to the beginning of each shift.

1. Remove all excess dirt, oil, and grease from the outer case of the device.

2. Check the oxygen pressure gauge. The pressure gauge reading must be at or above 2,100 psi. If the gauge cannot be read or the pressure is below 2,100 psi, the device must be removed from service.

3. Check the latch seals. The device is provided with three latch seals, one for each security band and one on the release rod. These seals are provided to help ensure that the device has not been accidentally opened or altered. If all three latch seals are opened or missing the device must be removed from service. At least one of the latch seals provided on the two security bands must be the original latch seal provided by Ocenco. The original latch seals are silver in color with a black Ocenco logo. If a mine operator wishes to maintain all the security seals, Ocenco provides a replacement latch seal. These replacement seals are silver in color with a green Ocenco logo. If at least one of the seals provided on the security bands does not have the original black logo, the device must be removed from service.

4. Check the device for indications of a high force impact. If the view through the clear cover is obstructed so that a proper examination cannot be performed on the device (e.g., scuff marks, stickers, paint, etc), the device must be removed from service. Some indicators of a high force impact are: a) case is cracked, burned or deformed; b) the "U" seal is opened or rolled; c) there are loose parts inside the device; d) the bottle pad (red rubber) is cut, deformed or displaced; e) the pressure gauge is bent or indicator needle is broken; f) the scrubber mounts are bent; g) the scrubber canister is dented; h) there are signs of dirt, debris, or moisture inside the case; or i) the handle loops are broken. If any of these indicators are observed, the device must be removed from service.

5. Check the yellow mouthpiece plug. If the mouthpiece plug is

not seated in the mouthpiece, the device must be removed from service.

6. The device is equipped with two external carrying straps. Both of these straps must be on the device and both straps must be maintained in good condition. If not, the device must be removed from service.

NOTE: A record of the daily examination is not required unless a device was required to be removed from service.

MSHA RECOMMENDED 90-DAY INSPECTION PROCEDURES:

Each SCSR device provided for use at a mine must be examined at least every 90 days to ensure that the device is ready for use in the event of an emergency.

The 90-day examination procedure for the Ocenco EBA 6.5 SCSR device is the same as the daily examination procedure with the exception of the record. A record of the 90-day examination must be kept at the mine site. The record must include the date the last 90-day examination was conducted on each device and the name of the person who conducted the examination. Such record must be made available upon request.

Failure to conduct the 90-day examination, or to maintain a record of the date and the name of the person who conducted the last 90-day examination, may result in a device(s) being removed from service and appropriate enforcement action being taken.

Devices that are removed from service due to lack of adequate documentation of the 90-day examination may be placed back in service upon passing a 90-day examination and a record being made of the date of the examination and the name of the person who conducted the examination.

Service-Life Expiration Date:

The service-life for the Ocenco EBA 6.5 SCSR is a maximum of 15 years from the date of manufacture, with a factory service required every 5 years if the device is worn or carried, and a factory service required at 10 years if the device is "stored."

In order for a device to be considered "stored," it must be placed in a fully enclosed container. The interior of the storage container must be lined with foam rubber or other shock-absorbing material. The fit between the devices in the storage container should be snug enough to help prevent motion but still allow for easy removal of the device from the storage container in the event of an emergency. If an Ocenco EBA 6.5 SCSR device is not "stored" in this manner, it is not considered a "stored" device and the 5-year factory service requirement applies.

All Ocenco EBA 6.5 SCSR devices in service must have a Factory Service label located on the back of the device inside the clear cover. This label documents: 1) the date the device was manufactured; 2) the date the next factory service is due if carried; and 3) the date the next factory service is due if "stored." If the Factory Service label is not on the device, or the label appears to have been altered, the device is no longer considered an approved device and must be removed from service.

NOTE: Before any enforcement action is taken requiring an Ocenco EBA 6.5 SCSR device to be removed from service because it does not have the required Factory Service label described above, you are advised to: 1) obtain as much information as possible regarding these devices; and 2) contact the Division of Health Coal Mine Safety and Health at (703) 235-1358.

To determine the end of service-life, add 15 years to the date of manufacture printed on the Factory Service label. This date is contingent on the device having met the requirement of being factory serviced (1) every 5 years if the device is worn or carried or (2) at 10 years if the device is "stored."

Once a device reaches the manufacturer’s NIOSH/MSHA approved service-life expiration date or mandatory factory service date, it is no longer considered an approved device and must be removed from service. Failure to remove the device from service upon the device reaching its approved service-life expiration date or mandatory factory service date may result in appropriate enforcement action being taken.

CONDITIONS OF USE REQUIREMENTS:

1. The device must pass the daily and 90-day inspection requirements.

2. The device must be within the manufacturer's approved service-life expiration date, and Mandatory Factory Service date.

3. The device should only be used for escape purposes.

4. The device should not be stored at temperatures below 10^{o} F for extended periods of time. If the temperature of the device is below 10^{o} F, it should be removed from service. The device may be placed back in service once the temperature of the device is above 10^{o} F.

5. The device should not be stored in areas where it may be exposed to temperatures above 140^{o} F. If a device is stored in an area where it may have been exposed to temperatures above 140^{o} F, the elastomeric parts may fail and the device may not function as designed. Accordingly, the device should be removed from service and returned to Ocenco for service.

The manufacturer's approved user's manual contains more detailed information and should be used to resolve any conflict that may arise from enforcing the MSHA recommended daily and 90-day examination requirements.

OCENCO M-20

MSHA RECOMMENDED DAILY INSPECTION PROCEDURES:

A daily examination must be conducted on each device being carried underground prior to the beginning of each shift.

1. Remove all excess dirt, oil, and grease from the outer case of the device.

2. Check the oxygen pressure gauge. The white pressure gauge indicator must be in the pie-shaped green area on the gauge. If the indicator is in the red portion of the gauge, or the gauge cannot be read for any reason, the device must be removed from service.

3. Check the device for indications of a high force impact.

Some indicators of a high force impact are: a) case is cracked, burned, deformed, or shows signs of excessive wear; b) a gap appears between the cover and the base; c) the latch seal is broken or cover band is loose or deformed; d) the pressure gauge is bent or the indicator needle is bent or broken; e) there are signs of dirt, debris, or moisture inside the case; or f) the belt loops are broken or cracked. If any of these indicators are observed, the device must be removed from service.

NOTE: A record of the daily examination is not required unless a device was required to be removed from service.

MSHA RECOMMENDED 90-DAY INSPECTION PROCEDURES:

Each SCSR device provided for use at a mine must be examined at least every 90 days to ensure that the device is ready for use in the event of an emergency.

The 90-day examination procedure for the Ocenco M-20 SCSR device is the same as the daily examination procedure with the exception of the record. A record of the 90-day examination must be kept at the mine site. The record must include the date the last 90-day examination was conducted on each device and the name of the person who conducted the examination. Such record must be made available upon request.

Failure to conduct the 90-day examination, or to maintain a record of the date and the name of the person who conducted the last 90-day examination, may result in a device(s) being removed from service and appropriate enforcement action being taken.

A device that is removed from service due to lack of adequate documentation of the 90-day examination may be placed back in service upon passing a 90-day examination and a record being made of the date of the examination and the name of the person who conducted the examination.

Service-Life Expiration Date:

The service-life for the Ocenco M-20 SCSR is a maximum of 15 years from the date of manufacture, with a factory service required every 5 years if the device is worn or carried, and a factory service required at 10 years if the device is "stored."

In order for a device to be considered "stored," it must be placed in a fully enclosed container. The interior of the storage container must be lined with foam rubber or other shock-absorbing material. The fit between the devices in the storage container should be snug enough to help prevent motion but still allow for easy removal of the device from the storage container in the event of an emergency. If an Ocenco M-20 SCSR device is not "stored" in this manner, it is not considered a "stored" device and the 5-year factory service requirement applies.

All Ocenco M-20 SCSR devices in service must have a label located on the back of the device just under the latch. This label documents: 1) the serial number; 2) the date the device was manufactured; 3) the date the next factory service is due if carried; and 4) the date the next factory service is due if "stored."

If the factory service label is not on the device, or the label appears to have been altered, the device is no longer considered an approved device and must be removed from service.

To determine the end of service-life, add 15 years to the date of manufacture printed on the Factory Service label. This date is contingent on the device having met the requirement of being factory serviced (1) every 5 years if the device is worn or carried or (2) at 10 years if the device is "stored."

Once a device reaches the manufacturer's NIOSH/MSHA approved service-life expiration date or mandatory factory Service date, it is no longer considered an approved device and must be removed from service. Failure to remove the device from service upon the device reaching its approved service-life expiration date or mandatory factory Service date may result in appropriate enforcement action being taken.

CONDITIONS OF USE REQUIREMENTS:

1. The device must pass the daily and 90-day inspection requirements.

2. The device must be within the manufacturer's approved service-life expiration date and mandatory factory service date.

3. The device should only be used for escape purposes.

4. The device should not be stored at temperatures below 10^{o} F for extended periods of time. If the temperature of the device is below 10^{o} F, it should be removed from service. The device may be placed back in service once the temperature of the device is above 10^{o} F.

5. The device should not be stored in areas where it may be exposed to temperatures above 140^{o} F. If a device is stored in an area where it may have been exposed to temperatures above 140^{o} F, the elastomeric parts may fail and the device may not function as designed. Accordingly, the device should be removed from service and returned to Ocenco for service.

The manufacturer's approved user's manual contains more detailed information and should be used to resolve any conflict that may arise from enforcing the MSHA recommended daily and 90-day examination requirements.